

## WHAT IS CLAIMED IS:

1. A process for producing an ethylcellulose having an ethoxyl content  
5 of from 40 to 55 percent and a viscosity of from 1 to 100 mPa's, measured as a 5 weight  
percent solution in toluene and ethanol at a volume ratio of 80:20 at 25°C, which process  
comprises the step of depolymerizing an ethylcellulose having an ethoxyl content of from 40  
to 55 percent and a viscosity of from 4 to 400 mPa's in the presence of gaseous hydrogen  
halide to achieve a reduction in viscosity of the ethylcellulose of at least 10 percent.

10 2. The process of Claim 1 wherein an ethylcellulose having an ethoxyl  
content of from 40 to 55 percent and a viscosity of from 1 to 10 mPa's is produced.

15 3. The process of Claim 1 or 2 wherein the depolymerization is  
conducted in the presence of gaseous hydrogen chloride.

20 4. The process of any one of Claims 1 to 3 wherein the  
depolymerization step is conducted in the presence of from 0.5 to 5.0 percent of water,  
based on the weight of the ethyl cellulose.

25 5. The process of any one of Claims 1 to 4 wherein the  
depolymerization step is conducted in the presence of from 0.1 to 0.5 weight percent of  
hydrogen chloride, based on the total weight of ethylcellulose to be depolymerized.

30 6. The process of any one of Claims 1 to 5 wherein depolymerized  
ethylcellulose is packaged without a neutralization step after depolymerization.

7. The process of any one of Claims 1 to 6 wherein an ethylcellulose  
having a viscosity of from 4 to 100 mPa's is depolymerized to an ethylcellulose having a  
viscosity of from 1 to 2.5 mPa's.

8. A process for producing an ethylcellulose having an ethoxyl content of from 40 to 55 percent and a viscosity of from 1 to 100 mPa's, measured as a 5 weight percent solution in toluene and ethanol at a volume ratio of 80:20 at 25°C, which process comprises the steps of

5 a) etherifying alkalized cellulose with ethyl chloride in the presence of an organic solvent to produce an ethylcellulose having an ethoxyl content of from 40 to 55 percent and a viscosity of from 4 to 400 mPa's and

b) depolymerizing the produced ethylcellulose in the presence of gaseous hydrogen halide to achieve a reduction in viscosity of the ethylcellulose of at least  
10 10 percent.

9. The process of Claim 6 wherein the depolymerization step b) is carried out as claimed in any one of claims 2 to 8.

15 10. An ethylcellulose having an ethoxyl content of from 40 to 55 percent and a viscosity of from 1 to 2.5 mPa's, measured as a 5 weight percent solution in toluene and ethanol at a volume ratio of 80 : 20 at 25 °C.

20 11. The ethylcellulose of Claim 7 having a viscosity of from 1 to 2.3 mPa's.

12. The ethylcellulose of Claim 7 or Claim 8 having an ethoxyl content of from 45 to 52 percent.

25 13. Use of the ethylcellulose of any one of Claims 10 to 12 for preparing a tablet coating or a film for controlled drug release.